



Tech Data Life Cycle “As is” Processes within NAVSEA Submarine Programs

Naval Sea Systems Command - 92L
Submarine Technical Data and Training Requirements
Division





Who We Are -

TEAM SUBMARINE is a NAVSEA organization who manages numerous Department of Defense acquisition category (ACAT) programs. Widely recognizable programs include:

- | The LOS ANGELES Class (SSN 688) fast attack submarines
- | The OHIO Class (SSBN 726) "TRIDENT" strategic submarines
- | The SEAWOLF Class (SSN 21) fast attack submarines
- | The New Attack or Virginia Class Submarine
- | The BSY-I, BSY-II, ARC-I Combat Weapon systems
- | Deep Submergence Rescue Vehicles

Where We Have

Been - Problems and Progress



- Trying to live with evolving and conflicting standards
- Over 90% of our legacy data has been converted - it took us almost 10 years
- New acquisitions have been generally trying to drive standards to be followed by all
- No one in charge

Current Submarine Programs Status -



- We have IETMs and associated infrastructure on over 60 submarines, and they are being used to satisfy daily operations, maintenance, and training requirements.
- We have IETMs being used in technical training pipelines and schoolhouses.
- We have IETMs being used by shore and **industrial support communities**.

Each instance presents a unique digital document delivery environment problem

Tech Data Digital Product Inventory



- System and Component Technical Manuals
- Engineering Drawings
- Preventive and Corrective Maintenance Support Data and Standards
- Work Package Support Tools
- Technical Training Products

Current Delivery Methods -



- Hard Copy (Rapidly Diminishing)
 - Mix of web-browser and legacy runtime data presentation tools
 - Local Area Networks (shipboard)
 - LAN/WAN solutions (shore-based support infrastructure)
 - Advanced Technical Information Support (ATIS) System

What is Influencing Our “As Is” Processes?



- Chief of Naval Operations' IT-21 vision
 - Dept. of the Navy finally provided Digital Data Policy in November 1999.
 - DOD Joint Information Architecture (JIA) vision and guidance
 - Technology has matured
 - Sufficient industry consensus on Web Standards
 - NAVSEA ERP

Where We Are Going



- A Digital Library schema that merges the best of legacy and acquisition investment and web-enabled interoperability
- A common information architecture that is platform neutral
- A practical point-of-use implementation strategy

“AS IS” Process

Issues -



- ETM/IETM Authoring and Life-Cycle Maintenance
- Data Reuse within other products and systems
- Really Understanding How Your Audience Uses ETMs/IETMs in Their Environment
- The Use of Digital Manuals in Operational Scenarios
- Digital Library of the Future - Knowledge Management Initiatives
- Data Sensitivity and Distribution Across Business Intranet

Evolving Delivery Scenarios -

■ Greater Interest in using PDAs and handheld devices



□ Virtual Submarine Project

□ Web-ATIS

- All types of digital docs
 - | SGML, HTML, XML (XHTML), PDF, Hybrids

- Integration with other legacy applications

- training, supply, and maintenance

□ ERP IDE

The screenshot displays the Virtual Submarine system interface. At the top, there is a banner with the text "VIRTUAL SUBMARINE" and "Welcome Virtual S". Below the banner, the date "August 30, 2000" is shown. A navigation bar with tabs "Global", "Tucson", "Admin", and "My Portal" is visible. The "Global" tab is selected, showing a "Virtual Submarine (Global)" dashboard. The dashboard includes a "MM1 Stone" section with icons for home, help, inbox, and training, and a "Training Management" section with tables for "Long Range" and "Short Range" training. The "Long Range" table lists "2001 LRTP" and "2000 LRTP" with edit and delete links. The "Short Range" table lists "2000 Q4 SRTP", "2000 Q3 SRTP", and "2000 Q2 SRTP" with edit and delete links. Below the dashboard, a screenshot of the Web-ATIS interface is shown, featuring a search bar and a list of documents categorized under "VA CLASS" and "WEB-ATIS".

Benefits that we are realizing -



- Dovetails with larger IDE/ERP initiatives
- Less equipment downtime
- Greater user satisfaction and effectiveness
- Proactive manuals vs. Reactive
- Reduced training time through product integration

Summary -



- We are committed to the vision of the JIA
- We are working hard to leverage and optimize existing Navy investment
- We are big on doing more collaboration with other programs
- We are not in a race with anybody!